

eauc case study

CLASSIFICATION:
Carbon Reduction
SUB CLASSIFICATION:
Strategy

TITLE:

Carbon Reduction at Leicester College

DATE:

JULY 2010



INSTITUTION PROFILE

FE
1,600 Staff
3 Main Sites

SUMMARY

Leicester College has made significant financial savings following a focus on carbon reduction. A planned approach to the savings means that every opportunity to save carbon has been taken, including making the college's £44m new-build project as low-carbon as possible. Staff and students are engaged with the sustainability agenda and the college is now taking steps to embed sustainability across its procurement, curriculum and travel strategies.

EAUC COMMENT

Leicester City College has used a new build project as a way of securing the sustainable development of its campus. Getting students involved in, and staff engaged with, the project promises a bright and sustainable future for the College.

PROJECT PARTNERS

The Carbon Trust

THE PROBLEM

Leicester College had been working to reduce its carbon footprint but the actions had not been co-ordinated. The task was to formulate a strategic approach to the issue.

In 2006 Leicester College wanted to take concerted action to minimise its carbon footprint. The main driver was the Learning and Skills Council's (LSC) guidance document 'From Here To Sustainability'. The college had already undertaken a pilot leadership for sustainability project run by the Centre for Excellence in Leadership. This project was college-wide and involved all levels of management including Governors.

The project led to the formation of a Sustainability Forum which produced an action plan identifying a number of clear goals – including reducing the college's carbon footprint. The forum represents a proactive group of staff committed to making the college a more sustainable place to learn and work. A comprehensive new build programme presented the perfect opportunity to turn these desires into reality.



THE APPROACH

The college's Sustainability Forum asked the Carbon Trust to assess both the existing college buildings and the plans for new ones with a view to minimising their carbon footprint. The Carbon Trust visited the college on a number of occasions

The first action suggested was engaging and educating staff and learners about switching lighting and equipment off. This was carried out across all campuses and had a direct impact on energy consumption. This was followed by:

- Adjusting heating controls
- Insulating pipe work
- Sealing off draughts

These were quick fixes with little outlay to the college.

The next phase was to start investing in technology, for example installing:

- Energy efficient lighting
- Variable speed motors – which reduce energy consumption
- Double glazing

The group recognised that for any changes to be the most effective, a whole-college approach would be needed. They knew that having a strategy and communicating this clearly to everyone at the college would be the best way to make the most impact. The communications strategy included:

- Notice boards across the college containing news updates
- A regular article in the college's newsletter
- Highlighted in the Principal's address to staff twice a year
- Getting learners involved in the work – for example, when the college undertook thermal imaging of existing buildings' construction. Learners were invited to view the images and comment
- Presentation of progress to governors

In addition to making changes to the planned new build programme to make it as low carbon as possible, the college needed to carry out refurbishment of its existing estate. Some funding came from the LSC via its Salix fund. The college also used some of its capital expenditure budget after management were shown evidence of how long the investment would take to pay for itself in savings. The entire project received full support from senior management, which was vital to its success.

Projects undertaken include:

- Installing a new boiler plant at a cost of £1.2 million
- New lighting technology at a cost of £60,000
- Insulation at a cost of £30,000

The group also recognised the value the project would have in updating knowledge of staff about sustainable development. It wanted to use it as a way to build capacity on the subject. The projects were publicised widely and the technology has been accessed by learners and staff as a teaching tool.

OUR GOALS

- Make the college more energy efficient
- Reduce the college's carbon footprint as a complement to the other sustainability work the college was engaged in
- Save money in the long term through reduced energy bills
- Develop a whole-college approach to the project
- Communicate clearly with staff, learners and the wider community about the project
- Use the project to build capacity for sustainable development among staff.

OBSTACLES AND SOLUTIONS

- Engagement of staff – sustainable development is a difficult concept for staff and is often limited to the idea of recycling
- Building relationships with all departments is crucial to getting staff engaged in the project. The key is to provide ways for staff to gain confidence to act. Celebrating success no matter how small is an easy way to motivate people.

- Funding the improvements
 - A strong cost-benefit analysis is needed so you can prove the financial benefits of what you're asking to invest. Investigate the funding streams available outside of your institution and maximise the free help you can get, for example, from the Carbon Trust.
- Knowing where to start
 - Get help from experts e.g. the Carbon Trust. Learn from examples of what other colleges have done. Access networks e.g. The East Midlands regional FE group for Sustainable Development.

PERFORMANCE AND RESULTS

- The college invested £44 million in its new-build and refurbishment programme and at the heart of this was energy efficiency and carbon reduction, with every avenue of technology being explored to reduce energy consumption.
- £1.2 million has been spent on installing a new boiler plant and savings of 40% have been made on the running costs.
- In every refurbishment project, regardless of the size or budget, every opportunity is taken to reduce energy consumption, using the latest lighting technologies and water-saving devices.
- The college is now taking an overall approach and looking at green travel, procurement and energy consumption to quantify impact.
- The college is identifying and developing opportunities to embed sustainable development across the curriculum.

LESSONS LEARNT

- Work as a team. The estates department is the key to making these kinds of improvements. You must work with them to ensure that wide benefits can be reaped from an investment
- Support from the top is crucial. Without support from the college's senior leadership team any sustainability group will be nothing more than a talking shop to showcase ideas
- Further education has a critical role to play in future 'green collar' jobs – those in the new low carbon industries. You must get learners involved by embedding it into the curriculum and lead by example on this issue
- Maximise the free help available from organisations such as the Carbon Trust
- Invest to save. A little investment – as in paying for the thermal imaging the college carried out – can reap big savings by targeting the improvements you make
- Engagement and awareness is a major part of improving the college's overall sustainability. It cannot be carried out in isolation without involving your college community.

FURTHER INFORMATION

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 The Carbon Trust - www.carbontrust.co.uk



The Environmental and Sustainability Champion within Further and Higher Education in the United Kingdom.

The EAUC provides training, advice and support to our members as well as providing a forum for best practice in the sector.

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